LITTLE GIANT DITCH Lower Rapid Valley Irrigation Ditches On the North Side of Rapid Creek Rapid City Vicinity Pennington County South Dakota

HAER No. SD-13
HAER
SD
52-RACI.V,
4-

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service Department of the Interior Denver, Colorado 80225-0287

### HISTORIC AMERICAN ENGINEERING RECORD

# HAER SD SZ-RACI.V,

# LITTLE GIANT DITCH LOWER RAPID VALLEY IRRIGATION DITCHES

HAER No. SD-13

#### I. INTRODUCTION

Location:

The Little Giant Ditch is located on the north side of

Rapid Creek in Pennington County, South Dakota, in

the vicinity of Rapid City

Quad:

Rapid City East and Box Elder

UTM:

Zone 13

Diversion: 64920

649200 E, 4878150 N 651640 E, 4876850 N

Date of Construction:

c. 1878

Present Owner:

Little Giant Ditch Company (unincorporated)

c/o Wayne Anderson

Rapid Valley

Rapid City, South Dakota 59701

Present Use:

Irrigation

Significance:

The Little Giant Ditch is significant for its association with the development of irrigated agriculture in South Dakota. The ditch is a representative example of

irrigation systems constructed, maintained, and

operated by farmers.

Historian:

Lon Johnson

Renewable Technologies, Inc.

Butte, Montana 59701

February 1994

#### II. HISTORY

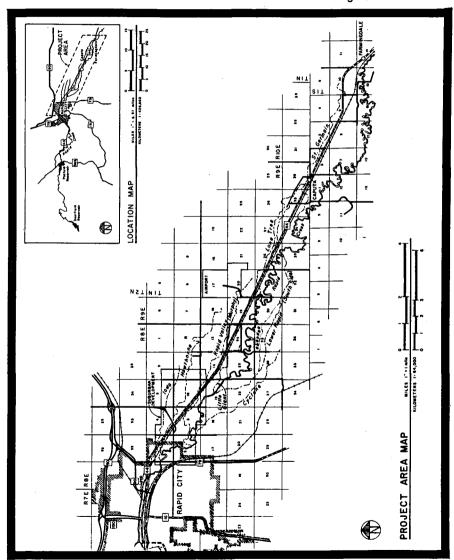
The Little Giant Ditch is located in the Lower Rapid Valley, just east of Rapid City, South Dakota. (See map on page 3.) The ditch diverts water from Rapid Creek, a major tributary of the Cheyenne River, which flows through the valley. The valley is about 40 miles long, and from one to two miles wide. By 1878, farmers occupied the valley floor from Rapid City east for a distance of ten miles. These farmers, individually and in groups, began digging irrigation ditches from Rapid Creek to bring water to their crops. Over the next decade, most of the ditches became part of farmer-owned ditch corporations. The stockholders of these corporations worked together to expand, operate, and maintain the ditches. Of the 12 or so ditch companies that have operated in the Lower Rapid Valley, seven continue to provide water to about 9,000 acres. (See HAER No. SD-5 for a historical narrative of the Lower Rapid Valley irrigation ditches.) The Little Giant Ditch Company is likely representative of many of the smaller, now defunct, ditch companies. These ditch companies were comprised of a few neighboring farmers using a common ditch to serve a small area.

The Little Giant Ditch Company is one of several unincorporated ditch companies that have existed in the Rapid Valley. A 1942 list of water right appropriators on Rapid Creek included the unincorporated Leedy Ditch, Lemley and Taylor Ditch, Allison Ditch, and Brennan-Lockhart Ditch.<sup>1</sup>

The Little Giant Ditch Company is apparently one of the oldest irrigation ditches in the Lower Rapid Valley. Its water right dates to April 6, 1878; the third priority water right to Rapid Creek.<sup>2</sup>

No information is currently available documenting the history of the ditch company.

In 1937, the Bureau of Reclamation found that 2,335 irrigable acres could be served by the Little Giant Ditch, although water shortages limited actual acres irrigated to about one-half that number.<sup>3</sup> In 1989, the Little Giant Ditch provided water to 1,014 acres.<sup>4</sup>



#### III. DESCRIPTION

Water for the Little Giant Ditch is obtained from Rapid Creek through the diversion canal of the South Side Ditch Company. (See HAER No. SD-8 for description of the headgate structure.) From the headgate structure, the ditch is about 12" wide and 12" deep. In just a few feet, it enters an inverted syphon (constructed in 1957) which carries it beneath Rapid Creek.

From the end of the northeast end of the syphon, the ditch crosses the southeast quarter of Section 15, T1N, R8E in a southeasterly direction. At the line between Sections 15 and 14, it turns east for about one-half mile. It then jogs south and east. Once it reaches the line of Section 24 it heads south for about one-half mile and then east-southeast for a short distance to its point of termination.

#### IV. FUTURE OF THE PROPERTY

The United States Department of Agriculture Water Quality Hydrologic Unit Area, Lower Rapid Creek Project, in Pennington County, South Dakota, was approved for funding by the Secretary of Agriculture in December of 1990. The Little Giant Ditch may be affected as part of the project.

See HAER No. SD-5 for a full description of the undertaking.

#### V. ENDNOTES

- 1. "List of Rapid Valley Appropriators," 26 August 1942. Typescript copy in Hawthorne Ditch Company Records, Rapid City, South Dakota.
- U.S. Department of the Interior, Bureau of Reclamation, "Rapid Valley Water Management Study," July 1990. Copy in Soil Conservation Service Office, Rapid City.
- 3. U.S. Department of the Interior, Bureau of Reclamation, "Report on Rapid Valley Irrigation Project South Dakota," November 1937, 40. Copy in Library, Bureau of Reclamation, Newell, South Dakota.
- 4. U.S. Department of the Interior, Bureau of Reclamation, "Rapid Valley Water Management Study Appendix," Appendix J, July 1990. Copy in Soil Conservation Service office, Rapid City.

## VI. SELECTED BIBLIOGRAPHIC CITATIONS

"List o	of Rapid Valley Appropriators." 26 August 1942. Typescript copy in Hawthorne Ditch Company Records, Rapid City, South Dakota.
U.S. [	Department of the Interior. Bureau of Reclamation. "Rapid Valley Water Management Study." July 1990. Copy in Soil Conservation Service Office, Rapid City.
	. "Rapid Valley Water Management Study Appendix," Appendix J. July 1990. Copy in Soil Conservation Service office, Rapid City.
	"Report on Rapid Valley Irrigation Project South Dakota."  November 1937. Copy in Library, Bureau of Reclamation, Newell, South Dakota.